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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,372	03/24/2004	Adrian Steiner	PA-222	3962
21920	7590	07/24/2009	EXAMINER	
MEREK, BLACKMON & VOORHEES, LLC 673 S. WASHINGTON ST. ALEXANDRIA, WV 22314			KASENGE, CHARLES R	
ART UNIT	PAPER NUMBER			
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,372	<b>Applicant(s)</b> STEINER ET AL.
	<b>Examiner</b> CHARLES R. KASENGE	<b>Art Unit</b> 2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 March 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 47-78 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 47-78 is/are rejected.  
 7) Claim(s) 47,54,63,65-67,69,71 and 73 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 24 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Allowable Subject Matter***

1. The indicated allowability of claim 47 is withdrawn in view of the newly discovered reference(s) to Evans U.S. Patent 4,440,239. Rejections based on the newly cited reference(s) follow.

***Claim Objections***

2. Claims 47, 54, 63, 67, 69, 71 and 73 are objected to because of the following informalities: the Examiner recommends changing "the work stream" to "a work stream" to remove any possibility that antecedent basis needs to be established.

3. Claims 54 and 67 are objected to because of the following informalities: in line 2, "the discharge" should be "a discharge". Appropriate correction is required.

4. Claim 65 is objected to because of the following informalities: in 2nd line from the bottom, "the generation" should be "generation". Appropriate correction is required.

5. Claim 66 is objected to because of the following informalities: "the step" should be "a step". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 47-49, 53-59, 63, 64, 66-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans U.S. Patent 4,440,239.

8. Regarding claims 47, 54, 57, 63 and 67-78, Evans discloses an apparatus to control the rate of flow of a stream of pressurized fluid through a conduit connected to a pump that draws fluid from a reservoir, the apparatus comprising: (i) a flow measurement device for generating an output signal proportionate to the rate of flow of said fluid there through, said flow measurement device being operatively connected to said conduit (col. 3, lines 49-51; Fig. 1); (ii) a flow control device operatively connected to said conduit downstream of said flow measurement device, said flow control device including an adjustable orifice wherein upon the opening of said orifice a portion of said stream of pressurized fluid is independently released from said conduit by said flow control device (col. 5, lines 20-39); and, (iii) a controller operatively connected to said flow control device for receiving said output signal generated by said flow measurement device and for causing said adjustable orifice in said flow control device to open or close as necessary to maintain the flow of pressurized fluid as measured by said flow measurement device within predetermined limits (col. 3, lines 20-38; col. 7, lines 23-50; col. 12, lines 13-34; Fig. 5) wherein said portion of said stream of pressurized fluid independently released from said conduit by said flow control device is injected into the work stream of a wellbore and said flow control device, together with the pump and reservoir, forming part of a continuous loop fluid circuit (col. 4, lines 45-58; Fig. 1), said flow control device being adjustable to control the release of pressurized fluid from the continuous loop fluid circuit (col. 3, lines 20-38; col. 7, lines 23-50; col. 12, lines 13-34).

Regarding claim 48, Evans discloses the apparatus as claimed in claim 47 wherein said flow control device includes an automatically adjustable choke or valve (col. 5, lines 20-39).

Regarding claims 49, 59 and 64, Evans discloses the apparatus as claimed in claim 47 wherein said flow measurement device includes a turbine in communication with said stream of pressurized fluid (col. 4, lines 53-57).

Regarding claims 53, 58 and 66, Evans discloses the apparatus as claimed in claim 47 wherein said controller is a microprocessor control, said microprocessor control being programmable to automatically adjust said orifice in said flow control device in accordance with fluctuations in said output signal received from said flow measurement device to maintain the flow of fluid as measured by said flow measurement device within a pre-determined range (col. 3, lines 56-61; col. 5, lines 20-39; col. 7, lines 23-50).

Regarding claim 55, Evans discloses the apparatus as claimed in claim 54 including a visual indicator for responding to said output signal generated by said flow measurement device (abstract).

Regarding claim 56, Evans discloses the apparatus as claimed in claim 55 wherein said visual indicator comprises a gauge for indicating the volumetric flow of fluid as measured by said flow measurement device (col. 5, lines 15-22).

#### *Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 50, 60 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans U.S. Patent 4,440,239.

11. Evans discloses monitoring pressure to ensure that the system operates properly (col. 1, lines 63-66), but does not expressly disclose the use of a pressure sensor.

Official notice is taken that using a pressure sensor to monitor the pressure condition was well known at the time the invention was made in the analogous art of measurement devices.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a pressure sensor to monitor and ensure the pressure is maintained at a desired level. One of ordinary skill in the art would have been motivated to do this in order to prevent undesirable conditions (col. 1, lines 63-66; col. 5, lines 15-22).

Therefore, it would have been obvious to modify Evans to obtain the invention as specified in claims 50, 60 and 65.

12. Claims 51, 52, 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans as applied to the claims above, and further in view of Harpster U.S. Patent 4,942,763. Evans discloses flow measurement devices (col. 4, lines 53-57) but does not disclose the measurement device including a pitot tube or pilot pressure tube. Harpster discloses the device as claimed in claim 1 wherein said flow measurement device includes a pitot tube (col. 14, lines 31-34) or a pilot pressure tube (col. 10, lines 19-23).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art for Evans's flow measurement devices to include a pitot or pilot pressure tube.

One of ordinary skill in the art would have been motivated to do this since Harpster discloses them as standard components for a flow sensor (col. 10, lines 19-23 and col. 14, lines 31-34).

Therefore, it would have been obvious to modify Evans with Harpster to obtain the invention as specified in claims 51, 52, 61 and 62.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 23, 2009

/Charles R Kasenga/  
Primary Examiner, Art Unit 2121